

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (withdrawn) A method of current modulation-based talkback from a slave device to a master device comprising the following steps:
  - a) establishing an electrically connected system that includes a master device and at least one slave device, and has a background level of current draw noise;
  - b) holding background current draw noise in said system low when it is desired that a slave device talkback to said master device; and,
  - c) during step b), modulating current flowing through a slave device such that said modulation corresponds to data desired to be transmitted to said master device, wherein said modulation includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device.
2. (withdrawn) The method of claim 1, further comprising the step of said master device receiving and interpreting the data transmitted in step c).
3. (withdrawn) The method of claim 1, wherein said system has a low voltage state and a high voltage state, and step b) includes the step of holding the voltage level of the system low.
4. (withdrawn) The method of claim 3, wherein said modulation of step c) results in a digital data representation.

5. (withdrawn) The method of claim 1, wherein said system further includes a bus, and said system includes more than one slave device.
6. (withdrawn) The method of claim 5, wherein step b) comprises establishing a limitation in said system to prevent all slave devices, other than a slave device that is talking back to the master device, from drawing current from said bus above a predetermined maximum noise level below which accurate reception of talkback data by the master device is ensured.
7. (withdrawn) The method of claim 1, wherein said system is an electronic blasting system and said slave device is an electronic detonator.
8. (withdrawn) The method of claim 7, wherein said system further includes a bus, said master device is a blasting machine, and said system includes more than one electronic detonator.
9. (withdrawn) The method of claim 8, wherein step b) comprises establishing a limitation in said system to prevent all detonators, other than a detonator that is talking back to the blasting machine, from drawing current from said bus above a predetermined maximum noise level below which accurate reception of talkback data by the blasting machine is ensured.
10. (withdrawn) The method of claim 9, wherein said establishing a limitation in said system includes the step of providing in said electronic detonators a storage capacitor and a communication interface that includes rectifier bridge diodes.

11. (previously presented) An electrically-connected system for modulation-based talkback from a slave device to a master device comprising:
  - a) a master device; and,
  - b) at least one slave device configured and/or programmed to transmit data to said master device through current modulation-based talkback, wherein said current modulation-based talkback includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device;wherein the system has a background level of current draw noise and is configured and/or programmed such that the background level of current draw noise in said system is held low when it is desired that a slave device talkback to said master device.
12. (previously presented) The electrically-connected system of claim 11, wherein said system has a low voltage state and a high voltage state, and said system is configured and/or programmed to hold the voltage level of the system low when it is desired that a slave device talkback to said master device.
13. (previously presented) The electrically-connected system of claim 11, wherein said system further includes a bus, and said system includes more than one slave device.
14. (previously presented) The electrically-connected system of claim 11, wherein said system is an electronic blasting system and said slave device is an electronic detonator.
15. (previously presented) The electrically-connected system of claim 14, wherein said system further includes a bus, said master device is a blasting machine, and said system includes more than one detonator.

16. (previously presented) A slave device for use in an electrically connected system including a master device and having a background level of current draw noise, said device configured and/or programmed to talkback to said master device by current modulation, wherein said current modulation includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device, and wherein said device is further configured and/or programmed to talkback to said master device when said background level of current draw noise in said system is low.
17. (previously presented) The slave device of claim 16, wherein said system has a low voltage state and a high voltage state, and said device is configured and/or programmed to talkback to said master device only when the voltage level of said system is low.
18. (withdrawn) The slave device of claim 16, wherein said system is an electronic blasting system and said slave device is an electronic detonator.
19. (withdrawn) The slave device of claim 18, wherein said system further includes a bus, said master device is a blasting machine, and said system includes more than one detonator.
20. (withdrawn) The slave device of claim 18, wherein said electronic detonator includes a storage capacitor and a communication interface that includes rectifier bridge diodes.
21. (new) A method of modulation-based talkback from a slave device to a master device comprising the step of using the electrically-connected system of claim 11.

22. (new) The method of claim 21, wherein said method includes the step of establishing a limitation in said electrically-connected system to prevent all slave devices, other than a slave device that is talking back to the master device, from drawing current above a predetermined maximum noise level below which accurate reception of talkback data by the master device is ensured.
23. (new) The method of claim 22, wherein said step of establishing a limitation in said electrically-connected system includes the step of providing in said slave devices a storage capacitor and a communication interface that includes rectifier bridge diodes.
24. (new) The method of claim 22, wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.
25. (new) The method of claim 23, wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.